

# PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

**PCT**

To:  
 MEWBURN ELLIS LLP  
 York House  
 Attn. Sutcliffe, Nicholas  
 23 Kingsway  
 London, Greater London  
 WC2B 6HP  
 UNITED KINGDOM

NOTIFICATION OF TRANSMITTAL OF  
 THE INTERNATIONAL SEARCH REPORT AND  
 THE WRITTEN OPINION OF THE INTERNATIONAL  
 SEARCHING AUTHORITY, OR THE DECLARATION

NRSCP 627911

- 2 SEP 2005  
 (PCT Rule 44.1)

Date of mailing  
 (day/month/year)

05/09/2005

Applicant's or agent's file reference

NRSCP6279111

**FOR FURTHER ACTION**

See paragraphs 1 and 4 below

International application No.

PCT/GB2005/000572

International filing date

17/02/2005

Applicant

CAMBRIDGE UNIVERSITY TECHNICAL SERVICES LTD

1.  The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

**Filing of amendments and statement under Article 19:**

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

**When?** The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

**Where?** Directly to the International Bureau of WIPO, 34 chemin des Colombettes  
 1211 Geneva 20, Switzerland, Fascimile No.: (41-22) 740.14.35

**For more detailed instructions,** see the notes on the accompanying sheet.

2.  The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

3.  **With regard to the protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

- the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until **30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the International Searching Authority  
 European Patent Office, P.B. 5818 Patentlaan 2  
 NL-2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl.  
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Authorized officer

Anna Rauf

## NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

### INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

#### What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

**When?** Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

#### Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

**How?** Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

**The amendments must be made in the language in which the international application is to be published.**

#### What documents must/may accompany the amendments?

**Letter (Section 205(b)):**

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

**The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.**

## NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

**The following examples illustrate the manner in which amendments must be explained in the accompanying letter:**

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:  
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:  
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:  
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or  
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:  
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

### **"Statement under article 19(1)" (Rule 46.4)**

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

**It must be in the language in which the international application is to be published.**

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

### **Consequence if a demand for International preliminary examination has already been filed**

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

### **Consequence with regard to translation of the international application for entry into the national phase**

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

**PATENT COOPERATION TREATY**  
**PCT**

**INTERNATIONAL SEARCH REPORT**

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference  NRSCP6279111	<b>FOR FURTHER ACTION</b>	
	see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No.  PCT/GB2005/000572	International filing date (day/month/year)  17/02/2005	(Earliest) Priority Date (day/month/year)  17/02/2004
Applicant		

CAMBRIDGE UNIVERSITY TECHNICAL SERVICES LTD

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 8 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
- The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b.  With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.
2.  **Certain claims were found unsearchable** (See Box II).
3.  **Unity of invention is lacking** (see Box III).
4. With regard to the **title**,
- the text is approved as submitted by the applicant.
- the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

- the text is approved as submitted by the applicant.
- the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. \_\_\_\_\_
- as suggested by the applicant.
- as selected by this Authority, because the applicant failed to suggest a figure.
- as selected by this Authority, because this figure better characterizes the invention.
- b.  none of the figures is to be published with the abstract.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/GB2005/000572

## Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
  - a. type of material  
 a sequence listing  
 table(s) related to the sequence listing
  - b. format of material  
 in written format  
 in computer readable form
  - c. time of filing/furnishing  
 contained in the international application as filed  
 filed together with the international application in computer readable form  
 furnished subsequently to this Authority for the purpose of search
2.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/GB2005/000572

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K14/705 C12N15/12 C07K16/28 C12N5/10 C12Q1/68  
G01N33/48 G01N33/50

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K C12N C12Q G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, Sequence Search, WPI Data, PAJ, EMBASE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	RADOSAVLJEVIC M ET AL: "A cluster of ten novel MHC class I related genes on human chromosome 6q24.2-q25.3" GENOMICS, ACADEMIC PRESS, SAN DIEGO, US, vol. 79, no. 1, January 2002 (2002-01), pages 114-123, XP002314793 ISSN: 0888-7543 page 117 - page 121; table 1 -& DATABASE EMBL 'Online' 12 February 2002 (2002-02-12), "Homo sapiens retinoic acid early transcript 1 (RAET1L) mRNA, complete cds." XP002341481 retrieved from EBI accession no. EM_PRO:AY039682 Database accession no. AY039682 ----- -/-	1-40, 42-47

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*8\* document member of the same patent family

Date of the actual completion of the international search

22 August 2005

Date of mailing of the international search report

05/09/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl.  
Fax: (+31-70) 340-3016

Authorized officer

Mabit, H

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/GB2005/000572

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 03/054152 A (HYSEQ, INC; TANG, Y., TOM; ASUNDI, VINOD; GOODRICH, RYLE, W; REN, FEIY) 3 July 2003 (2003-07-03)      sequences 273, 1184      -&amp; DATABASE Geneseq 'Online!      29 January 2004 (2004-01-29), "Novel protein (useful for identifying genetic disorders) #273."      XP002341482      retrieved from EBI accession no.      GSN:ADE08118      Database accession no. ADE08118      -&amp; DATABASE Geneseq 'Online!      29 January 2004 (2004-01-29), "Novel coding sequence (useful for identifying genetic disorders) #273."      XP002341483      retrieved from EBI accession no.      GSN:ADE07207      Database accession no. ADE07207      -----</p>	1-8, 11-13
X	<p>DATABASE EMBL 'Online!      7 March 2000 (2000-03-07), "hd39b04.x1      Soares_NFL_T_GBC_S1 Homo sapiens cDNA      clone IMAGE:2911855 3' similar to      SW:ZA2G_MOUSE Q64726      ZINC-ALPHA-2-GLYCOPROTEIN PRECURSOR ; ,      mRNA sequence."      XP002341484      retrieved from EBI accession no.      EM_PRO:AW510737      Database accession no. AW510737      the whole document      -----</p>	1-6
A	<p>COSMAN D ET AL: "ULBPs, Novel MHC class I-related molecules, bind to CMV glycoprotein UL16 and stimulate NK cytotoxicity through the NKG2D receptor"      IMMUNITY, CELL PRESS, US,      vol. 14, no. 2, February 2001 (2001-02),      pages 123-133, XP002314794      ISSN: 1074-7613      -----</p>	
P, X	<p>BACON LOUISE ET AL: "Two human ULBP/RAET1 molecules with transmembrane regions are ligands for NKG2D"      JOURNAL OF IMMUNOLOGY,      vol. 173, no. 2,      15 July 2004 (2004-07-15), pages      1078-1084, 1066, XP002341373      ISSN: 0022-1767      page 1079 - page 1081; figure 2      -/-</p>	1-40, 42-47
3		

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/GB2005/000572

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P , X	<p>-&amp; DATABASE EMBL 'Online! 17 June 2004 (2004-06-17), "Homo sapiens RAET1G2 mRNA, complete cds; alternatively spliced." XP002341485 retrieved from EBI accession no. EM_PRO:AY172580 Database accession no. AY172580</p> <p>-&amp; DATABASE EMBL 'Online! 17 June 2004 (2004-06-17), "Homo sapiens RAET1G1 mRNA, complete cds; alternatively spliced." XP002341486 retrieved from EBI accession no. EM_PRO:AY172579 Database accession no. AY172579</p> <p>-----</p> <p>DATABASE Geneseq 'Online! 3 June 2004 (2004-06-03), "Human RL5 related DNA, seq id 9." XP002341487 retrieved from EBI accession no. GSN:ADL23365 Database accession no. ADL23365 the whole document</p> <p>-----</p>	1-8

10/589851

International Application No. PCT/GB2005/000572

FURTHER INFORMATION CONTINUED FROM

PCT/ISA 210

1AP14 Rec'd PCT/PTO 37 AUG 2006

Continuation of Box II.1

Although claims 46-47 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

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Continuation of Box II.2

Claims Nos.: 41

Claim 41 relates to modulators of RAET1G activity without giving a true technical characterization of the claimed matter. Consequently, the scope of said claim is ambiguous and vague and its subject-matter is not sufficiently disclosed and supported to be searched (Art. 5 and 6 PCT).

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/GB2005/000572

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:  

Although claims 46–47 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2.  Claims Nos.: 41 because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  

see FURTHER INFORMATION sheet PCT/ISA/210
3.  Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/GB2005/000572

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
WO 03054152	A 03-07-2003	US 2004219521 A1		04-11-2004
		AU 2002366951 A1		09-07-2003
		CA 2458818 A1		10-04-2003
		CA 2469941 A1		03-07-2003
		EP 1427747 A2		16-06-2004
		EP 1504099 A2		09-02-2005
		JP 2005503821 T		10-02-2005
		WO 03029405 A2		10-04-2003
		WO 03054152 A2		03-07-2003
		AU 2003240755 A1		13-10-2003
		WO 03082915 A2		09-10-2003
		EP 1492557 A2		05-01-2005
		US 2004048817 A1		11-03-2004
		US 2005095237 A1		05-05-2005

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

### FOR FURTHER ACTION

See paragraph 2 below

International application No.  
PCT/GB2005/000572

International filing date (day/month/year)  
17.02.2005

Priority date (day/month/year)  
17.02.2004

International Patent Classification (IPC) or both national classification and IPC  
C07K14/705, C12N15/12, C07K16/28, C12N5/10, C12Q1/68, G01N33/48, G01N33/50

Applicant  
CAMBRIDGE UNIVERSITY TECHNICAL SERVICES LTD

#### 1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

#### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

#### 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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D-80298 Munich  
Tel. +49 89 2399 - 0 Tx: 523656 epmu d  
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Authorized Officer

Mabit, H

Telephone No. +49 89 2399-7270



**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/GB2005/000572

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - a sequence listing
    - table(s) related to the sequence listing
  - b. format of material:
    - in written format
    - in computer readable form
  - c. time of filing/furnishing:
    - contained in the international application as filed.
    - filed together with the international application in computer readable form.
    - furnished subsequently to this Authority for the purposes of search.

4. Additional comments:

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**Box No. II Priority**

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1.  The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, where required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date (Rules 43bis.1 and 64.1) is the claimed priority date.
2.  This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

see separate sheet

**Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

- the entire international application,  
 claims Nos. 41 and claims 46-47 for IA

because:

- the said international application, or the said claims Nos. 46, 47 for IA relate to the following subject matter which does not require an international preliminary examination (*specify*):  
**see separate sheet**
- the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):
- the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
- no international search report has been established for the whole application or for said claims Nos. 41
- the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:  
the written form                            has not been furnished  
    does not comply with the standard  
the computer readable form               has not been furnished  
    does not comply with the standard
- the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.
- See separate sheet for further details

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/GB2005/000572

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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or  
industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes:	Claims	9-40, 42-47
	No:	Claims	1-8
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-40, 42-47
Industrial applicability (IA)	Yes:	Claims	1-40, 42-45
	No:	Claims	

**2. Citations and explanations**

**see separate sheet**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

**Re Item II**

**Priority**

The current assessment is based on the assumption that all claims enjoy the priority rights from the filling date of the priority document (17.02.2004). Should the priority of the application not be valid, the PX documents cited in the International Search report would be relevant with respect to novelty and inventive steps (Article 33(2) and 33(3) PCT).

**Re Item III**

**Non establishment of opinion with regard to novelty, inventive step and industrial applicability**

According to Rule 66.1(e) PCT claims relating to inventions in respect of which no international search report has been established need not to be the subject of international preliminary examination.

As a consequence, this written opinion is established for claims 1-40 and 42-47.

Claims 46-47 relate to subject-matter considered by this Authority to be covered by the provisions of Rule 67.1(iv) PCT. Consequently, no opinion will be formulated with respect to the industrial applicability of the subject-matter of these claims (Article 34(4)(a)(I)PCT). In addition, the attention of the Applicant is drawn to the fact that no criteria exist in PCT for assessment of patentable inventions. The EPO, for example, considers that the subject-matter of claims 46-47 as far as they concern a medical treatment or a diagnostic method, related to a subject-matter covered by the provision of Rule 52(4) EPC. Consequently, in a eventual subsequent examination in regional phase, this invention would not be considered as susceptible of industrial application.

**Re Item V**

**Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Reference is made to the following documents:

- D1: RADOSAVLJEVIC M ET AL: "A cluster of ten novel MHC class I related genes on human chromosome 6q24.2-q25.3" GENOMICS, ACADEMIC PRESS, SAN DIEGO, US, vol. 79, no. 1, January 2002 (2002-01), pages 114-123, XP002314793 ISSN: 0888-7543
- D2: WO 03/054152 A (HYSEQ, INC; TANG, Y., TOM; ASUNDI, VINOD;

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/GB2005/000572

GOODRICH, RYLE, W; REN, FEIY) 3 July 2003 (2003-07-03)

D3: DATABASE EMBL [Online] 7 March 2000 (2000-03-07), "hd39b04.x1  
Soares\_NFL\_T\_GBC\_S1 Homo sapiens cDNA clone IMAGE:2911855 3' similar  
to SW:ZA2G\_MOUSE Q64726 ZINC-ALPHA-2-GLYCOPROTEIN  
PRECURSOR ;, mRNA sequence." XP002341484 retrieved from EBI accession  
no. EM\_PRO:AW510737 Database accession no. AW510737

**1. Novelty (Art 33(2) PCT)**

The Sequence of 741nt disclosed in D1 with the Accession number AY039682 displays 94.8% identity with SEQ ID N°3 (1143nt) of the present application on 710nt overlap.

Moreover, the sequence of 213aa disclosed in D2 with the Accession number ADE08118 displays 96.7% identity with SEQ ID N°2 (212aa) of the present application and with SEQ ID N°1 (333aa) in 211aa overlap.

The sequence of 735nt also disclosed in D2 with the Accession number ADE07207 displays 99.8% identity with SEQ ID N°3 (1143nt) in 683nt overlap and with SEQ ID N°4 (939nt) in 635nt overlap.

Finally, the sequence of 584nt disclosed in D3 displays 99.8% identity with SEQ ID N°4 in 584nt overlap.

SEQ IDs N°1-4 are novel over the prior art. However, considering their wording, the subject-matter of claims 1-8 is anticipated by D1-D3.

**2. Inventive step (Art 33(3) PCT)**

Even if the Applicant would limit the claims to SEQ ID N°1-4, the Search Division is of the opinion that this subject-matter will still lack an inventive step.

Indeed, the document D1 describes a cluster containing the gene RAET1G. In Table 1 of D1, the genomic sequence of the RAET1G gene is disclosed, as well as the potential exons of the genes and ESTs useful to clone a said gene.

The application differs from D1 by the fact that in the present application the cDNA sequences (two different alternative splices) of the corresponding genomic sequence are given.

A skilled person aware of D1 would have searched the transcripts of the genomic sequences and therefore would have arrived at the subject-matter claimed without exercising an inventive skill.

Moreover, the application mentions that the RAET1Gs identified are able to bind NKG2D and UL16. The characteristic to bind NKG2D was already associated to product of the genomic RAET1G in D1. The characteristic to bind UL16 was mentioned for RAET1I, H, and N. Therefore, a skilled person would have searched if the new identified member of the RAET1 family would display such characteristic.

Therefore, at present an inventive step cannot be recognized for the subject-matter of the present application.

The Claims related to the sequences do not appear to be inventive because the added subject-matter does not include any additional matter that could render them inventive as such.

**Remarks:**

1. The Applicant mentions that the sequences of figures 1 and 2 are encoded by the sequences of database numbers AY172579 and AY172580 (description page 3). However, this does not appear to be the case. Moreover, the sequences of accession numbers AAO22238.1 and AAO22239.1 do not correspond to SEQ IDs N° 1 and 2 (or to the sequences shown in figure 1). These inconsistencies render therefore the Application not clear (Art 6 EPC).
2. The attention of the Applicant is drawn to the fact that a reply to this opinion is only expected if he intends to file a chapter II demand.